LISTING OF CLAIMS

1. (Previously Presented) An apparatus for coding an information signal, the apparatus comprising:

means for processing the information signal in order to obtain data packets, each data packet being of a data packet type of a predetermined set of data packet types, at least one of the data packet types being a removable data packet type; and

means for arranging the data packets into a data stream so that the data stream comprises consecutive access units of consecutive data packets, so that, within each access unit, the data packets belonging to a respective access unit are arranged in accordance with a predetermined order among the data packet types,

wherein the means for processing and the means for arranging are adapted so that, even when a data packet of the removable data packet type is removed from the data stream, borders between successive access units are still detectable from the data stream by use of the predetermined order and all data packets remain associated with the respective access unit they originally belonged to before removal of any data packet of the removable data packet type, with the detection by use of the predetermined order involving detecting an existence of a border between two successive access units each time a data packet of a first data packet type precedes a data packet of a second data packet type that, in accordance with the predetermined order, precedes the first data packet type.

2. (Original) The apparatus of claim 1, wherein the means for processing and the means for arranging are adapted further so that even when a data packet of the removable data packet type is removed from the data stream, the data stream is still consistent with predetermined parsing rules for parsing the data stream.

3. (Original) The apparatus in accordance with claim 1, wherein each data packet comprises a type number being indicative of which data packet type same data packet is.

4. (Original) The apparatus of claim 1, wherein the data packet of the removable data packet type further comprises payload data.

5. (Original) The apparatus of claim 1, wherein all data packet types whose data packets are not absolutely necessary for retrieval of the information signal are removable data packet types.

6. (Original) The apparatus of claim 1, wherein at least one removable data packet type is a negligible data packet type, with data packets of that type not being necessary for retrieval of the information signal from the data stream.

7. (Previously Presented) The apparatus of claim 1, wherein the at least one removable data packet type is an essential data packet type, with data packets of that type being necessary for retrieval of the information signal from the data stream, and being associated with an identifier, wherein at least one data packet of the other data packets comprises the identifier.

8. (Original) The apparatus of claim 1, wherein the predetermined set of data packet types further comprises at least one non-removable data packet type.

9. (Original) The apparatus of claim 8, wherein the predetermined order at least defines as to whether data packets of the removable data packet type has to precede or have to follow data packets of the non-removable data packet type within an access unit.

10. (Original) The apparatus of claim 1, wherein the means for processing and the means for arranging are adapted so that each access unit comprises at least one non-removable data packet.

11. (Original) The apparatus of claim 1, wherein each access unit is assigned to a different time portion of the information signal.

12 – 17 (Cancelled)

18. (Previously Presented) An apparatus for decoding a data stream representing a coded version of an information signal, the data stream comprising consecutive access units of consecutive data packets, each data packet being of a data packet type of a predetermined set of data packet types, at least one of the data packet types being a removable data packet type, and the data packet within each access unit being arranged in accordance with a predetermined order among the data packet types, such that, even when a data packet of the removable data packet type is removed from the data stream, borders between successive access units are still detectable from the data stream by use of the predetermined order and all data packets remain associated with the respective access unit they originally belonged to before removal of any data packet of the removable data packet type, with the detection by use of the predetermined order involving detecting an existence of a border between two successive access units each time a data packet of a first data packet type precedes a data packet of a second data packet type that, in accordance with the predetermined order, precedes the first data packet type, the apparatus comprising

means for detecting a border between successive access units by use of the predetermined order by detecting an existence of a border between two successive access units each time a data packet of a first data packet type precedes a data packet of a second data packet type that, in accordance with the predetermined order, precedes the first data packet type; and

means for decoding the successive access units.

19. (Previously Presented) The apparatus of claim 18, wherein the predetermined set of data packet types further comprises at least one non-removable data packet type, and the predetermined order at least defines as to whether the data packets of the removable data packet type have to pre-

cede or follow data packets of the non-removable data packet type, and wherein the means for detecting comprises

means for detecting the beginning of a new access unit if, either,

1) a preceding data packet is of a non-removable data packet type and a current data packet is of the removable data packet type, and, in accordance with the predetermined order, data packets of the removable data packet type have to precede data packets of the non-removable data packet type; or

2) a preceding data packet is of the removable data packet type and the current data packet is of a non-removable data packet type, and, in accordance with the predetermined order, data packets of the removable data packet type have to succeed data packets of the non-removable data packet type.

20. (Previously Presented) The apparatus of claim 18, wherein the predetermined set of data packet types comprises at least a first removable data packet type for which the predetermined order defines that data packets of that type have to precede data packets of the non-removable data packet type, and at least a second removable data packet type for which the predetermined order defines that data packets of that type have to succeed data packets of the non-removable data packet type, and wherein the means for detecting the beginning of a new access unit is adapted to detect the beginning of a new access unit further if the preceding data packet is of the second removable data packet type and the current data packet is of the first removable data packet type.

21. (Original) The apparatus of claim 18, wherein each data packet comprises a type number indicating of which data packet type same data packet is, and the apparatus further comprising

an input for receiving the data stream, data packet by data packet; and

means for investigating the type number of a current data packet in order to obtain the data packet type of the current data packet.

22. (Original) The apparatus of claim 18, wherein the information signal is a video signal, an audio signal or a multimedia signal.

23. (Original) The apparatus of claim 18, wherein each access unit belongs to a picture from a video.

24. (Previously Presented) The apparatus of claim 18, the apparatus further comprising

an input for receiving the data stream; and

a buffer for buffering the received data packets and discarding buffered data packets access unit-wise.

25. (Previously Presented) A process for coding a video or audio signal, comprising the steps of:

Processing the video or audio signal to produce_data stream representing a coded version of
said video or audio signal, the data stream comprising consecutive access units of consecutive data packets, each data packet being of a data packet type of a predetermined set of data packet types, at least one of the data packet types being a removable data packet type; and

Arranging the data packets within each access unit in accordance with a predetermined order among the data packet types such that, even when a data packet of the removable data packet type is removed from the data stream, borders between successive access units are still detectable from the data stream by use of the predetermined order and all data packets remain associated with the respective access unit they originally belonged to before removal of any data packet of the removable data packet type, with the detection by use of the predetermined order involving detecting an exis-

tence of a border between two successive access units each time a data packet of a first data packet type precedes a data packet of a second data packet type that, in accordance with the predetermined order, precedes the first data packet type.

26. (Previously Presented) A method for coding an information signal, the method comprising the following steps:

processing the information signal in order to obtain data packets, each data packet being of a data packet type of a predetermined set of data packet types, at least one of the data packet types being a removable data packet type; and

arranging the data packets into a data stream so that the data stream comprises consecutive access units of consecutive data packets, so that the data packets within each access unit are arranged in accordance with a predetermined order among the data packet types,

wherein the steps of processing and arranging are adapted so that, even when a data packet of the removable data packet type is removed from the data stream, borders between successive access units are still detectable from the data stream by use of the predetermined order and all data packets remain associated with the respective access unit they originally belonged to before removal of any data packet of the removable data packet type, with the detection by use of the predetermined order involving detecting an existence of a border between two successive access units each time a data packet of a first data packet type precedes a data packet of a second data packet type that, in accordance with the predetermined order, precedes the first data packet type.

27. (Cancelled)

28. (Previously Presented) A method for decoding a data stream representing a coded version of an information signal, the data stream comprising consecutive access units of consecutive data packets, each data packet being of a

data packet type of a predetermined set of data packet types, at least one of the data packet types being a removable data packet type, and the data packet within each access unit being arranged in accordance with a predetermined order among the data packet types, such that, even when a data packet of the removable data packet type is removed from the data stream, borders between successive access units are still detectable from the data stream by use of the predetermined order and all data packets remain associated with the respective access unit they originally belonged to before removal of any data packet of the removable data packet type, with the detection by use of the predetermined order involving detecting an existence of a border between two successive access units each time a data packet of a first data packet type precedes a data packet of a second data packet type that, in accordance with the predetermined order, precedes the first data packet type, the method comprising the following steps:

detecting a border between successive access units by use of the predetermined order by detecting an existence of a border between two successive access units each time a data packet of a first data packet type precedes a data packet of a second data packet type that, in accordance with the predetermined order, precedes the first data packet type; and

decoding the successive access units.

29. (Previously Presented) Computer program having instructions for performing, when running on a computer, a method for coding an information signal, the method comprising the following steps:

processing the information signal in order to obtain data packets, each data packet being of a data packet type of a predetermined set of data packet types, at least one of the data packet types being a removable data packet type; and

arranging the data packets into a data stream so that the data stream comprises consecutive access units of consecutive data packets, so that the

data packets within each access unit are arranged in accordance with a predetermined order among the data packet types,

wherein the steps of processing and arranging are adapted so that, even when a data packet of the removable data packet type is removed from the data stream, borders between successive access units are still detectable from the data stream by use of the predetermined order and all data packets remain associated with the respective access unit they originally belonged to before removal of any data packet of the removable data packet type, with the detection by use of the predetermined order involving detecting an existence of a border between two successive access units each time a data packet of a first data packet type precedes a data packet of a second data packet type that, in accordance with the predetermined order, precedes the first data packet type.

30. (Cancelled)

31. (Previously Presented) Computer program having instructions for performing, when running on a computer, a method for decoding a data stream representing a coded version of an information signal, the data stream comprising consecutive access units of consecutive data packets, each data packet being of a data packet type of a predetermined set of data packet types, at least one of the data packet types being a removable data packet type, and the data packet within each access unit being arranged in accordance with a predetermined order among the data packet types, such that, even when a data packet of the removable data packet type is removed from the data stream, borders between successive access units are still detectable from the data stream by use of the predetermined order and all data packets remain associated with the respective access unit they originally belonged to before removal of any data packet of the removable data packet type, with the detection by use of the predetermined order involving detecting an existence of a border between two successive access units each time a data packet of a first data packet type precedes a data packet of a second data packet type that, in accordance with the predetermined order, precedes the first data packet type, the method comprising the following steps:

detecting a border between successive access units by use of the predetermined order by detecting an existence of a border between two successive access units each time a data packet of a first data packet type precedes a data packet of a second data packet type that, in accordance with the predetermined order, precedes the first data packet type; and
decoding the successive access units.

32. (Previously Presented) The apparatus of claim 1, wherein the means for processing and the means for arranging are adapted further such that more than one data packet of a same data packet type belong to one access unit.

33. (Previously Presented) The apparatus of claim 18, wherein the information signal comprises a video, and the means for detecting is configured such that the data packet types which are arranged according to the predetermined order comprise

a supplemental enhancement information data packet type, comprising supplemental enhancement information including timing information or supplemental data that enhances usability of a version of the information signal obtained by decoding the successive access units but are not necessary for obtaining the version of the information signal by decoding the successive access units; and

a coded picture data packet type comprising syntax elements of slice header data and/or syntax elements concerning slice transform coefficients of one or more slices of a picture of the video,

with, according to the predetermined order, data packets of the supplemental enhancement information data packet type preceding data packets of the coded picture data packet type.

34. (Previously Presented) The apparatus of claim 18, wherein the information signal comprises a video, and the means for detecting is configured such that the data packet types which are arranged according to the predetermined order comprise

a sequence parameter set data packet type comprising sequence parameter sets which apply to a series of consecutive pictures of the video; and

a picture parameter set data packet type comprising picture parameter sets which apply to the one or more individual pictures of the video within a series of consecutive pictures of the video,

a coded picture data packet type comprising syntax elements of slice header data and/or syntax elements concerning slice transform coefficients of one or more slices of a picture of the video,

with, according to the predetermined order, data packets of the sequence parameter set data packet type and data packets of the picture parameter set data packet type preceding the last data packet of the coded picture data packet type within the same access unit to which same belong.

35. (Previously Presented) The apparatus of claim 34, wherein either one or both of data packets of the sequence parameter set data packet type and picture parameter set data packet type are conveyed separate from the data stream by an extra transmission link such that, according to the predetermined order, data packets of the sequence parameter set data packet type and data packets of the picture parameter set data packet type are received by the apparatus earlier than the last data packet of the coded picture data packet type within the same access unit to which same belong.

36. (Previously Presented) The apparatus of claim 1, wherein the means for processing and the means for arranging are adapted such that a resulting access unit size of the access units does not result in an buffer overflow at a decoder's side, by forecasting a buffer space consumption at the decoder's side at an assumption that a minimum amount of buffer space is available at the decoder's side and that buffered data packets are discarded from the buffer space at the decoder's side access unit-wise.

37. (Previously Presented) The apparatus of claim 35, wherein the means for processing and the means for arranging are adapted such that a resulting

access unit size of the access units does not result in an buffer overflow at a decoder's side, by forecasting a buffer space consumption at the decoder's side at an assumption that a minimum amount of buffer space is available at the decoder's side and that buffered data packets are discarded from the buffer space at the decoder's side access unit-wise.

38. (New) Data carrier having stored thereon a data stream representing a coded version of a video or audio signal, the data stream comprising consecutive access units of consecutive data packets, each data packet being of a data packet type of a predetermined set of data packet types, at least one of the data packet types being a removable data packet type, and the data packets within each access unit being arranged in accordance with a predetermined order among the data packet types such that, even when a data packet of the removable data packet type is removed from the data stream, borders between successive access units are still detectable from the data stream by use of the predetermined order and all data packets remain associated with the respective access unit they originally belonged to before removal of any data packet of the removable data packet type, with the detection by use of the predetermined order involving detecting an existence of a border between two successive access units each time a data packet of a first data packet type precedes a data packet of a second data packet type that, in accordance with the predetermined order, precedes the first data packet type.